

assessing multiple factors potentially contributing to cognitive impairment in these patients. Interventions designed to address such symptoms may be helpful in ameliorating cognitive functioning in those with PACS.

Categories: Infectious Disease
(HIV/COVID/Hepatitis/Viruses)

Keyword 1: neuropsychological assessment

Keyword 2: attention

Keyword 3: fatigue

Correspondence: Melissa M. Gardner,
Dartmouth-Hitchcock Medical Center,
Melissa.M.Gardner@Hitchcock.org

63 Select Dietary Components are Associated with Better Global Cognition in Adults with HIV

Pariya L Fazeli¹, Christine Horvat Davey², Allison Webel³, Vitor Oliveira³, Thomas Buford¹, David E Vance¹, Greer Burkholder¹, Heidi Crane³, Julia Fleming⁴, Amanda Willig¹
¹UAB, Birmingham, AL, USA. ²CWRU, Cleveland, OH, USA. ³UW, Seattle, WA, USA. ⁴The Fenway Institute, Boston, MA, USA

Objective: People with HIV (PWH) are at an increased risk for cognitive impairment as they age compared to their HIV-negative counterparts. Lifestyle factors can have protective effects on cognitive outcomes among PWH. However, little work has examined diet quality and cognitive function in PWH. Examining the association between diet quality and cognitive function among PWH is particularly important given this population's increased risk for both poor diet quality and cognitive impairment. The purpose of this study was to examine the relationship between diet and cognitive function in aging PWH.

Participants and Methods: This cross-sectional study was conducted in Birmingham, Alabama and Cleveland, Ohio. Eighty-six PWH (mean age 56 years) completed standard triple-pass 24-hour diet recalls and a neurocognitive assessment. Partial Pearson's correlations were conducted between diet variables and global neurocognitive function T scores, adjusting for total calories, sex, and education level.

Results: Overall diet quality of the sample was poor. The overall sample presented with low

Healthy Eating Index (HEI)-2015 scores, high glycemic index, twice the goal amount for saturated fatty acids (SFAs), and inadequate consumption of several nutrients typically associated with cognitive health including omega-3 fatty acids, dietary protein, fiber, Vitamin D, Zinc, and several B-vitamins. Greater total calories per day ($r=0.28$, $p<0.05$), greater percentage of total calories of SFAs ($r=0.26$, $p<0.01$), and lower glycemic index ($r=-0.24$, $p<0.05$) were associated with better cognition. Higher intake of several individual fatty acids, particularly SFAs, were associated with better cognition (correlations ranging from 0.23 to 0.31). Higher intakes of phosphorus ($r=0.29$, $p<0.01$), magnesium ($r=0.25$, $p<0.05$), and potassium ($r=0.22$, $p<0.05$) were associated with better cognition. Higher grams/day of several amino acids were associated with better cognition (correlations ranging from 0.22 to 0.27).

Conclusions: In a sample with overall poor diet quality not meeting recommended guidelines, findings suggest that being nourished in itself is associated with better cognitive function. Associations with several individual nutrients may inform potential intervention targets to protect brain health in PWH. Further, targeting food insecurity in interventions may have downstream effects on cognition in PWH.

Categories: Infectious Disease
(HIV/COVID/Hepatitis/Viruses)

Keyword 1: cognitive functioning

Keyword 2: HIV/AIDS

Keyword 3: aging (normal)

Correspondence: Pariya L. Fazeli PhD,
Department of Family, Community, and Health
Systems, The University of Alabama
Birmingham, Birmingham, USA,
plfazeli@uab.edu

64 Sluggish Cognitive Tempo in Pediatric Patients with Post-Acute Sequelae of COVID-19: Moderating Role of Depression on Functional Impairment

Rowena Ng^{1,2}, Gray Vargas¹, Dasal Tenzin Jashar¹, Amanda Morrow^{1,2}, Laura A Malone^{1,2}
¹Kennedy Krieger Institute, Baltimore, MD, USA.
²Johns Hopkins University School of Medicine, Baltimore, MD, USA

Objective: Children with post-acute sequelae of COVID-19 (PASC) often report fatigue, attention problems, anxiety, and low mood. Sluggish cognitive tempo (SCT) is a constellation of behavioral symptoms (e.g., drowsiness, moving slowly, mental fogginess, daydreaming, confusion, or inattention) often associated with but distinct from attention-deficit/hyperactivity disorder (ADHD), executive function deficits and depressive symptoms. Given the apparent overlapping symptoms of PASC and SCT, this retrospective chart review aimed to 1) characterize SCT symptoms among pediatric patients with PASC relative to published normative and clinically referred samples, and 2) examine associations between subscales of SCT with ADHD symptoms, depression, anxiety, and functional impairment in this clinical sample.

Participants and Methods: This study included retrospective data from 25 patients with PASC (17 females; Mean age=13.73 years, SD=2.07, range=8-19) who were referred for a neuropsychological evaluation following a multidisciplinary visit at a post-COVID-19 rehabilitation clinic within an academic medical center. Patients' caregivers completed the SCT Scale, ADHD Rating Scale 5 (ADHD-RS-V), Conners Comprehensive Behavior Rating Scale (CBRS), and Impairment Rating Scale (IRS). Higher scores on the SCT, CBRS, and IRS total reflect more problems in the specified area. Welch's t-tests were utilized to compare SCT scores from our cohort of pediatric patients with PASC relative to a normative community sample (Penny et al., 2009) and a heterogeneous clinically-referred sample (Koriakin et al., 2015). Bivariate correlations were computed to examine associations between SCT (Daydreamy, Low Initiation, Sluggish/Sleepy), ADHD (Inattention and Hyperactivity subscales from the ADHD-RS-V), affective symptoms (Major Depressive Episode (MDE) and Generalized Anxiety Disorder (GAD) scales from the CBRS), and functional impairment (average score from IRS). Multiple linear regressions were used to determine whether SCT factors independently contribute to variance in functional deficits after accounting for age of evaluation, low mood, and anxiety.

Results: Sluggish/Sleepy and Low Initiation were elevated in our cohort with PASC as compared to normative and mixed clinical samples from Penny et al. and Koriakin et al. ($t > 4.36$, $p < 0.001$). Patients with PASC had lower scores on the Daydreamy SCT scale than the clinically referred cohort ($t = 2.06$, $p = 0.049$), but

similar to the normative sample ($t = 1.48$, $p = 0.15$). After controlling for age of testing, of the SCT subscales, only Low Initiation was associated with MDE ($r = 0.62$, $p = 0.005$), GAD ($r = 0.56$, $p = 0.01$) and overall Functional Impairment ($r = 0.48$, $p = 0.04$). Low Initiation was not correlated with Inattention or Hyperactivity. Notably, multiple regressions revealed Low Initiation scores were not associated with functional impairment when accounting for depression and anxiety symptoms (Low Initiation: $\beta = 0.48$, $p = 0.04$; Low Initiation when depression and anxiety are included in independent regression models: $\beta_s = 0.13$ and 0.29 , $p_s = 0.58$ and 0.27 respectively).

Conclusions: Children and adolescents with PASC demonstrate more sluggish/sleepy presentation and difficulties with initiating activities or directing effort, as compared to normative and mixed clinically referred samples. Low initiation was associated with symptoms of MDE and GAD and functional impairment, but not with symptoms of ADHD. Depression and anxiety may moderate the association between poor initiation with functional impairment, highlighting the importance of psychological interventions to address mental health among youth with PASC and behavioral/cognitive concerns.

Categories: Infectious Disease (HIV/COVID/Hepatitis/Viruses)

Keyword 1: infectious disease

Keyword 2: depression

Keyword 3: everyday functioning

Correspondence: Rowena Ng Department of Neuropsychology Kennedy Krieger Institute
ngr@kennedykrieger.org

65 The Best Tests: Optimizing Detection of Cognitive Decline in People Living with HIV

Sajda Adam¹, Will Dampier¹, Shinika Tillman¹, Kim Malone¹, Vanessa Pirrone¹, Michael Nonnemacher¹, Amy Althoff¹, Zsofia Szep^{2,1}, Brian Wigdahl¹, Maria Schultheis¹, Kathryn N Devlin¹

¹Drexel University, Philadelphia, PA, USA.

²University of Pennsylvania, Philadelphia, PA, USA